

REMARKS

Claims 21-22 are now pending in the application. Claims 21 and 22 are currently amended. Claims 1-20 have been withdrawn. Claims 23-24 have been cancelled. Support for the amended Claims 21 and 22 may be found throughout the specification as originally filed. The Examiner is respectfully requested to reconsider and withdraw the rejection(s) in view of the amendments and remarks contained herein.

SUBSTANCE OF THE INTERVIEW

Applicants wish to thank Examiner Jacob Y. Choi for the telephonic interview held May 23, 2006 with Applicants' Attorney of record, Jennifer S. Brooks. Therein, application of prior art references Burnett (U.S. Pat. No. 6,850,637), Polidor et al. (U.S. Pat. No. 5,690,417) and Thrailkill (U.S. Pat. No. 5,822,053) was discussed. Agreement with respect to Claims 21 and 22 was reached.

DRAWINGS

The drawings stand objected to for not showing every feature of the invention specified in the claims. Applicants respectfully submit that at page 15, lines 14-22, Figure 3B is described in precisely the manner claimed in Claim 22, with groups of light sources G1 and G2 each covering each divided range being aligned in the direction perpendicular to the direction for forming the light pattern (in the vertical direction of Figure 3B). Therefore the claimed subject matter is adequately illustrated in the drawings as originally filed.

CLAIM OBJECTIONS

Claims 21 and 22 are objected to because the term “monotonously” is a relative term which renders the claims indefinite. Applicants have amended Claims 21 and 22 by replacing the term “monotonously” with the term “monotonically” pursuant to the Examiner’s recommendation, therefore rendering this objection moot.

REJECTION UNDER 35 U.S.C. § 102

Claims 21 and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Burnett (U.S. Pat. No. 6,850,637). Claim 21 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Polidor et al. (U.S. Pat. No. 5,690,417). Claim 22 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Thrailkill (U.S. Pat. No. 5,822,053). These rejections are respectfully traversed.

Regarding Claim 21

In Burnett, Figs. 3 and 4 clearly show that lights from light sources 416, 418 are concentrated in the inspection area 414. That is, optical axes of light sources are disposed convergently toward an object, in Burnett. Also, each dot area in Fig. 4 (“SMALL ANGLE BEAM”, “LARGE ANGLE BEAM”) merely represents beam angle of single light source and does not mean the expansion of optical axes of light sources.

In Polidor, Figs. 1 and 2 clearly show that lights from light sources L are concentrated in the work piece W. That is, optical axes of light sources are disposed convergently toward an object in Polidor also.

On the other hand, according to the claimed invention, optical axes of light sources are disposed radially toward an object.

Regarding Claim 22

The Examiner indicates in Fig. 4 of Burnett that dot areas ("SMALL ANGLE BEAM", "LARGE ANGLE BEAM") correspond to "divided ranges" of the claimed invention. However, Applicants believe that this indication is improper.

Specifically, "SMALL ANGLE BEAM" and "LARGE ANGLE BEAM" project the same range of the inspection area 414. That is, a projection range is not divided in Burnett.

Furthermore, according to the claimed invention, groups of light sources respectively cover the plurality of divided ranges. In contrast, each dot area in Fig. 4 of Burnett represents beam angle of single light source. Also, light sources 416, 418 are aligned in the same direction as "SMALL ANGLE BEAM" and "LARGE ANGLE BEAM", which is entirely different from the feature of the claimed invention "groups of light sources respectively covering the plurality of divided ranges are aligned in a direction perpendicular to the direction for forming the light pattern".

Regarding Thrailkill, the Examiner states that A', B', C', D' in Fig. 11 correspond to the plurality of ranges. However, A'-D' merely represent centers of light distribution of LEDs in four quadrants A-D in Fig. 8. Also, they are not related with the feature of the claimed invention "a projection range is divided into a plurality of ranges in a direction for forming the light pattern" at all. In addition, even if for argument's sake it is assumed that A'-D' correspond to the divided ranges of the claimed invention, four quadrants A-D are arranged in the same way as A'-D'. This is entirely different from the feature of the claimed invention "groups of light sources respectively covering the plurality of divided ranges are aligned in a direction perpendicular to the direction for forming the light pattern".

For the foregoing reasons, both Burnett and Thraikill do not teach or suggest the claimed invention.

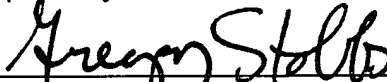
CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0750, under Order No. 5077-000069/US/DVA from which the undersigned is authorized to draw.

Dated: June 8, 2006

Respectfully submitted,

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